

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/067959 A1

(51) International Patent Classification⁷: **A61K 38/16**

(74) Agent: FISHER ADAMS KELLY; Level 13 AMP Place,
10 Eagle Street, Brisbane, Queensland 4000 (AU).

(21) International Application Number:
PCT/AU2005/000041

(22) International Filing Date: 14 January 2005 (14.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004900190 16 January 2004 (16.01.2004) AU
2004903914 16 July 2004 (16.07.2004) AU

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): CBIO LIMITED [AU/AU]; 17 Wakefield Street, Alderley, Queensland 4051 (AU).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): JOHNSON, Barbara Jane [AU/AU]; 10 Villosa Street, Shailer Park, Queensland 4128 (AU). SUHRBIER, Andreas [DE/AU]; 185 Mailmans Track, Bunya, Queensland 4055 (AU). NAYLOR, Dean Jason [AU/AU]; 9 Burlington Street, East Brisbane, Queensland 4169 (AU). DOBBIN, Caroline Amanda [AU/AU]; 17 Winona Street, Daisy Hill, Queensland 4128 (AU). HOWARD, Christopher Bruce [AU/AU]; 15 Landsborough Street, Rochedale, Queensland 4123 (AU).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHAPERONIN 10 MODULATION OF TOLL-LIKE RECEPTOR-INDUCIBLE CYTOKINE AND CHEMOKINE SECRETION

(57) Abstract: Methods of use of Chaperonin 10 (Cpn10) are provided for regulating Toll-like receptor signaling and/or Toll-like receptor inducible immunomodulator secretion. Cpn10 negatively regulates Toll-like receptor agonist-induced pro-inflammatory cytokine and chemokine secretion, examples being IL-6 and RANTES, respectively. Cpn10 positively regulates Toll-like receptor agonist-induced anti-inflammatory cytokine and chemokine secretion, an example being IL-10. These immunoregulatory activities of Cpn10 may be useful in the treatment of diseases, disorders and conditions resulting from excessive pro-inflammatory cytokine and chemokine secretion. This invention also relates to producing, designing and/or screening Cpn10 agonists and antagonists according to their ability to regulate Toll-like receptor signaling and/or Toll-like receptor inducible immunomodulator secretion.



WO 2005/067959 A1